Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

GENERAL INDEX

Classified entries will be found under Contributors and Reviewers. New names and names of new genera, species, and varieties are printed in **bold face** type; synonyms in *italic*.

A

Acacia 244
Acids, excretion by roots 422
Adaptation 146
Aerating system 336
African flora 527
Algae, Puget Sound 415
Allard, H. A., work of 245
Allen, C. E., work of 248
Allodus 527
Amanita 329
Amblynotopsis 329
American forestry 332
Amygdalus communis, membrane of 477
Anatomy of Drimys 335
Appleman, C. O. 528
Arachis hypogaea, membrane of 475
Artemisiastrum 325
Arthonia 244
Arthur, J. C. 501
Ascocarp of Rhizina undulata 282
Ascomycetes, conjugate nuclei in 168
Atmospheric pressure and nectar secretion 257

B

Bacteria, life cycle of 86
Bacteriology, soil 155
Bailey, I. W., work of 526, 527
Bailey, L. H., work of 86
Bakke, A. L. 242; work of 160
Balls, W. L., work of 159
Barium, effect on Spirogyra 406
Bartlett, H. H. 82
Bayliss-Elliott, Jessie S., work of 248
Bean, polycotyledonous 424; quantitative characters in 417
Berry, E. W., work of 167, 168, 243
Betulaceae, anatomy of 247
Blackman, V. H., work of 240
Blake, S. F., work of 244
Blanc, M. L., work of 524
Boerker, R. H., work of 333
Bog theories 424
Bombacites 168
Botrytis cinerea, parasitism of 240
Boysen-Jensen, P., work of 87
Briggs, L. J., work of 160, 327
Bristol, B. Muriel, work of 334, 526
British Columbia forests 331
Britton, N. L., work of 244
Brotherton, W. 417
Brown, W., work of 240
Brown, W. H., work of 419
Bryophyllum calycinum, influence of leaf upon root formation and geotropic curvature 25
Bryophytes, ecology of 525
Bunzell, H. H. 225
Bursa, monomeric capsules in 246
Burt, E. A., work of 244

C

Cabbage yellows 87
Caenomyces 168
Cane sugar and translocation 87
Capitanopsis 329
Capsules, monomeric in Bursa 246
Castalia 86
Cecidiology 156
Cedar swamp on Long Island 335
Cerium, effect on Spirogyra 406
Chamartemisia 325
Chamberlain, C. J. 51, 150
Chien, S. S. 406
China, new plants from 516
Chloachne 167
Chlorenchyma 100
Chodat, R., "La vegetation du Paraguay" 414
Christensen, C., work of 244
Cinchona, Botanical Station at 412
Citrus grandis, membrane of 478
Clematis chrysocoma **sericea** 516; **Kockiana** 518; Delavayi **calvescens** 517; urophylla **obtusiuscula** 517
Cohesion theory 162
Cole, Ruth D. 110; work of 335
Collins, F. S., work of 166
Conard, H. S., work of 86
Conductivity water, method for producing 321

Conjugate nuclei in Ascomycetes 168
Contributors: Appleman, C. O. 528; Arthur, J. C. 501; Bakke, A. L. 242; Bartlett, H. H. 82; Brotherton, W. 417; Bunzell, H. H. 225; Chamberlain, C. J. 51, 150; Chien, S. S. 406; Cole, Ruth D. 110; Cook, M. T. 85, 156; Coulter, J. M. 86, 87, 88, 155, 167, 168, 243, 247, 325, 329, 334, 336, 421, 424, 527; Coulter, M. C. 419; Crocker, W. 87, 333, 422; Cunningham, B. 486; Denny, F. E. 373, 468; DeVries, H. 1; Doubt, Sarah L. 209; Dunn, Grace A. 425; Fitzpatrick, H. M. 282; Forsaith, C. C. 190; Fuller, G. D. 154, 159, 165, 242, 248, 326, 331, 332, 335, 336, 418, 420, 423, 424, 525, 526; Gano, Laura 337; Gardner, N. L. 236; Groves, J. F. 169; Haas, A. R. 232; Harrington, G. T. 524; Harvey, R. B. 321; Hasselbring, H. 225, 240, 248; Heinemann, P. G. 155; Helmick, B. C. 81, 165; Hill, J. B. 410; Hutchinson, A. H. 124; Jeffrey, E. C. 161, 167, 245, 247; Johnson, D. S. 323, 412; Kenoyer, L. A. 249; Kraybill, H. R. 245; Land, W. J. G. 248; Link, G. K. K. 88; Loeb, J. 25; Newman, H. H. 153, 325; Osterhout, W. J. V. 77, 146, 317; Ramaley, F. 151; Reed, E. L. 229; Richards, H. M. 83; Rigg, G. B. 415; Robertson, C. 307; Schneider, C. 398, 516; Shull, C. A. 83, 162, 330, 528; Shull, G. H. 246; Spessard, E. A. 66; Stevens, F. L. 297; Stober, J. P. 89; Taylor, Aravilla 414; Weniger, Wanda 266; Wylie, R. B. 135
Cook, M. T. 85, 156
Cook, O. F., work of 527
Cooper, W. S., work of 331, 335, 336
Coprinus 329
Coulter, J. M. 86, 87, 88, 155, 167, 168, 243, 247, 325, 329, 334, 336, 421, 424, 527
Coulter, M. C. 419
Crocker, W. 87, 333, 422, work of 424
Cucurbita maxima, membrane of 477
Cunningham, B. 486
Cuticle 98
Cycads, fossil 161
Cyperus 244

D

Dahlgren, K. V. O., work of 246
Dalbergites 168
Dalzielia 167
Danthoniopsis 167
Darwin, F., work of 159, 326, 327
Denny, F. E. 373, 468
Desmopsis 166
Deutzia Rehderiana 398
DeVries, H. 1
Dillenites 168
Dioscorea, embryo and seedling of 334
Diploöspora 527
Dixon, H. N., work of 244
Doubt, Sarah L. 209
Drimys, anatomy of 335
Ducke, A., work of 421
Duggar, B. M., work of 334
Dumontia filiformis, development of 425
Dunn, Grace A. 425

E

East, E. M., work of 164
Ecology of Northern Florida 337
Embryo, of Dioscorea 334; of Euphorbia 266
Emerson, R. A., work of 417
Enlows, Ella M., work of 85
Entomophilous flowers, evolution of 307
Eocene plants 167, 168
Epidermal cells 96; hairs 92; wall 98
Eriolopha 167
Ether and potassium cyanide, effects of 77
Euphorbia, embryo sac and embryo of 266
Evolution 153; theory of 325
Excretion of acids by roots 422

F

Fairy rings 336
Fernald, M. L., work of 86
Fitzpatrick, H. M. 282
Flax, genetics of 165
Florida, allocthonous peat deposits of 190; ecology of 337
Florissant lake beds, plants of 336
Flowers and insects 307
Forest ecology, history of 333
Forestry 154
Forests, Philippine 418
Forsaith, C. C. 190
Four-lobed mother cells 248
Fred, E. B., "Soil bacteriology" 155
Frost, H. B., work of 82
Fujii, K., work of 164
Fuller, G. D. 154, 159, 165, 242, 248, 326, 331, 332, 335, 336, 418, 420, 423, 424, 525, 526; work of 424

G

Gager, C. S., "Fundamentals of botany" 323
Gano, Laura 337

Ganong, W. F., "Textbook of botany" 323
Galactia 244
Gall, grape leaf 157; hackberry 158; peridermium 156
Gardner, N. L. 236
Genetics, of flax 165; of maize endosperm 164
Geotropic curvature in Bryophyllum 25
Gerry, E., work of 526
Gloeocystopsis 330
Gortner, R. A., work of 528
Gossypium, leaf nectaries of 229
Grassland, mountain 242
Greenman, J. M., work of 421, 527
Griffiths, D., work of 422
Grout, A. J., "Moss flora of New York City" 325
Grove, W. B., work of 248, 527
Groves, J. F. 169; work of 424
Gwynne-Vaughan, D. T., work of 245, 246
Gymnoconia interstitialis 508

H

Haas, A. R. 232; work of 422
Hairs, epidermal 92
Halymenia 166
Harrington, G. T. 524
Harris, J. A., work of 424, 528
Hart, E. B., work of 330
Harvey, R. B. 321
Hasselbring, H. 225, 240, 248
Hawaiian bogs 248
Hawkins, L. A., work of 88
Hayes, H. K., work of 164
Heinemann, P. G. 155
Helmick, B. C. 81; 165
Heptanthus 244
Heribert-Nilsson, N., work of 81
Hill, J. B. 410
Hoar, C. S., work of 247
Howe, M. A., work of 166
Hulth, J. M., "Bref och Skrifvelser af och till Carl von Linné" 156
Humidity and nectar secretion 251
Hunter, C., work of 336
Hutchinson, A. H. 124
Hutchinson, J., work of 527
Hydropectis 325
Hypochnus 244
Hyslop, J. A., work of 85

I

Illinois Academy 424
Illuminating gas, response of plants to 209
Inga 422
Insects and plant diseases 85
Isle Royale, flora of 335

J

Jackson, B. D., "A glossary of botanic terms" 156
Jeffrey, E. C. 161, 167, 245, 247; work of 335
Johnson, D. S. 323, 412
Jones, W. N., work of 159
Jost, L., work of 162

K

Kenoyer, L. A. 249
Keteleeria Fortunei, morphology of 124
Kidston, R., work of 245
Kiesselbach, T. A., work of 328
Knightiophyllum 168
Knight, R. C., work of 159
Knowlton, F. H., work of 336
Koidzumi, G., work of 167
Koketsu, R., work of 333
Kraybill, H. R. 245
Kunkelia, Rosae-gymnocarpae 508; **nitens** 504
Kuwada, Y., work of 164

L

Laidlaw, C. G. P., work of 159
Lamb, W. H., work of 332
Land, W. J. G. 248
Lange, J. E., work of 329
Lawrence, J. V., work of 528
Leaf size in plant geography 242
Leaves, winter and summer 89
Lee, H. N., work of 526
Lehenbauer, P. A., work of 166
Leonard, M. D., work of 85
Lepiota 329
Liassic flora of Mexico 247
Lichens, ecology of 525; of Bermuda 167
Light and nectar secretion 258
Limonium 86
Link, G. K. K. 88
Linnaeus, correspondence of 156
Livingston, B. E., work of 159, 160, 165, 166, 326
Loeb, J. 25
Löhnis, F., work of 86
Long Island, cedar swamp on 335
Lotsy, J. P., "Evolution by means of hybridization" 153
Lycopodium, in America 66; prothallia and sporelings of 51

M

MacBride, J. F., work of 329
MacCaughey, V., work of 248
MacInnes, D. A., work of 424

Machaonia 244
Mahonia, **Alexandri** 519; **caesia** 519; **nivea** 521; **philippinensis** 520
Maidenia 422
Maize endosperm, genetics of 164
Malus, **docynioides** 400; pumila **subsessilis** 400
Mathews, D. M., work of 419
Matthiola annua, mutation in 82
Maxonia 244
Megalostylis 329
Mehlhop, Margaret, work of 424
Meliola 330
Membranes, of Amygdalus 477; Arachis 475; Citrus 478; cucurbita 477; Xanthium 476
Meniphylloides 168
Mexico, Liassic flora of 247
Microtome, freezing device for 236
Mischopleura 167
Moisture and temperature indices 165
Molisch, H., work of 416
Monomeric capsules in Bursa 246
Moon, F. F., "The book of forestry" 154
Moore, S. L., work of 329
Mosher, Edna, work of 424
Moss, flora 325; from Borneo 244; protonema, vitality of 334
Mother cells, four-lobed 248
Muenscher, W. L. C., work of 160
Murrill, W. A., work of 156
Mutation in Matthiola annua 82

N

Nectaries, environmental influence on secretion 249; of Gossypium 229
Neowollastonia 167
Newman, H. H. 153, 325
New Zealand, and subantarctic floras 423; distribution of species in 419
North American flora 155, 325
Nuphar 86
Nymphaea 86

O

Oenothera, blandina and crosses 9; genetics 81; Lamarckiana mut. velutina 1
Okamura, S., work of 329
Opuntia 422
Orange rusts of Rubus 501
Orton, C. R., work of 527
Osmundaceae, fossil 245
Ostenfeld, C. H., work of 88
Osterhout, W. J. V. 77, 146, 317
Overholts, L. O., work of 330

P

Palladin, W., work of 524
Pallis, Marietta, work of 420
Pappobolus 167
Paraengelhardtia 168
Paraguay, vegetation of 414
Parasitism, phenomena of 240
Pathology, problems of 297
Pearson, H. H. W., sketch of 150
Peat deposits of Florida 190
Pepoon, H. S., work of 424
Permeability 333; of membranes 468; of membranes to water 373; temperature coefficient of 317
Peroxidases and potassium permanganate 225
Pertz, D. F. M., work of 159
Philippine forests 418
Phytoplankton of the oriental tropics 88
Pilacre and Roesleria 248
Pittier, H., work of 422
Plant diseases and insects 85
Platymonas 167
Pollen, imperfection in Rosa 110
Polycotyledonous bean 424
Polygala 244
Polyporaceae 330
Potassium, cyanide and ether, effects of 77; permanganate and peroxidases 225
Potato rot 88
Pritchard, R. P., work of 527
Prothallia, branched 88; of Lycopodium 51, 66
Protoplasm, reaction of 232
Pseudomussaenda 528
Puget Sound algae 415

Q

Quercus 167

R

Rainfall and nectar secretion 253
Ramaley, F., work of 243, 336
Rand, F. V., work of 85
Raunkiaer, C., work of 242
Reed, E. L. 229
Reed, G. B., work of 417
Reed swamp, floating 420
Rendle, A. B., work of 422
Respiration, and temperature rate 524; in succulents 83
Reviews: Chodat's "La vegetation du Paraguay" 414; Fred's "Soil bacteriology" 155; Gager's "Fundamentals of botany" 323; Ganong's "Textbook of botany" 323; Grout's "Moss flora of New York City" 325; Hulth's

"Bref och Skrifvelser af och till Carl von Linné" 156; Jackson's "A glossary of botanic terms" 156; Lotsy's "Evolution by means of hybridization" 153; Moon's "The book of forestry" 154; Rydberg's "North American flora" 325; Scott's "Theory of evolution" 325
Rhizina undulata, ascocarp of 282
Richards, H. M. 83
Riddle, L. W., work of 167
Rigg, G. B. 415; work of 424
Robertson, C. 307
Rocky Mountains, subalpine plants of 423
Roesleria and Pilacre 248
Roots, excretion of acids 422; formation in Bryophyllum 25; Texas rot fungus of 334
Rosa, gymnocarpa 508; imperfection of pollen and mutability 110
Rosen, H. R., work of 157
Rubiaceae 422
Rubus, aboriginum 506; acaulis 509; argutus 506, 510; canadensis 506, 512; carpinifolius 507; cuneifolius 505; Enslenii 507; frondosus 506; hispidus 507; lucidus 507; macropetalus 504; nigrobaccus 505, 509, 511; occidentalis 504, 509, 511; orange rusts of 501; procumbens 506; pubescens 511; Randii 510, 512; sativus 505; stellatus 509; strigosus 509, 511; trivialis 507; vitifolius 504
Rydberg, P. A., "North American flora" 325; work of 423

S

Sabatia 86
Safford, W. E., work of 166
Sap, extraction of 528
Schisandra grandiflora 522; **cathayensis** 522; **rubiflora** 523
Schneider, C. 398, 516
Scott, W. B., "Theory of evolution" 325
Seedling of Dioscorea 334
Seeds, temperature and life duration of 169
Senecio 421, 527
Septobasidium 244
Shantz, H. L., work of 160, 327
Shepard, H. B., work of 526
Shreve, Edith B., work of 326, 327
Shreve, F., work of 332
Shull, C. A. 83, 162, 330, 528
Shull, G. H. 246; work of 246
Skene, M., work of 423
Skottsberg, C., work of 423
Smith, E. M., work of 526
Smith, G. M., work of 330
Smith, N. R., work of 86
Smith, Pearl M., work of 334
Soil, bacteriology 155; a new constituent 528; moisture index 151
Sorbus, **Ambrozyana** 401; hupehensis **aperta** 403; laxiflora 404; obtusa 403; tatsienensis 404
Spessard, E. A. 66
Spiraea **teretiuscula** 399
Spirogyra, effects of barium, strontium, and cerium on 406; sexuality of filament 486
Sprague, T. A., work of 527
Staining, manipulating organisms in 410
Standley, P. C., work of 155
Statice 86
Stenophyllus 244
Sterculiocarpus 168
Stevens, F. L. 297; work of 330
Stewart, A., work of 156
Stewart, V. B., work of 85
Stober, J. P. 89
Stomata 94
Strontium, effect on Spirogyra 406
Subalpine plants of Rocky Mountains 423
Subantarctic and New Zealand floras 423
Succulents, respiration in 83
Sulphur nutrition 330
Synaedrys 167

T

Tammes, Tine, work of 165
Taylor, Aravilla 414
Taylor, N., work of 335
Temperature, and moisture indices 165; and nectar secretion 253; and respiration rate 524
Ternstroemites 168
Theobroma 527
Thuranthos 422
Tobacco, mosaic disease of 245
Tottingham, W. E., work of 330
Translocation and cane sugar 87
Transpiration 159, 326
Trees, large 331
Trelease, S. F., work of 159
Tribroma 527
True, R. H., work of 422
Tunmann, O., work of 416
Tupper, W. W., work of 527

U

Uranthoecium 167
United States, vegetational map of 332

V

Vallisneria spiralis, pollination of 135
Vegetational map of United States 332
Vesicarpa 325

W

Walters, E. H., work of 528
Watson, W., work of 525
Wells, B. W., work of 158
Welsford, E. J., work of 168; 240
Weniger, Wanda 266
Wernham, H. F., work of 422, 528
West, G. S., work of 167
West, W., work of 526
Wieland, G. R., work of 161, 247
Willis, J. C., work of 420
Wise, L. R., work of 528
Wood structure, variations in 526
Wright, C. H., work of 422
Wuist, Elizabeth D., work of 88
Wylie, R. B., 135

X

Xanthium pennsylvanicum, membrane of 476

Y

Young, Esther, work of 424
Yuncker, T. G., work of 329

Z

Zamia 421
Ziegenbein, E., work of 524